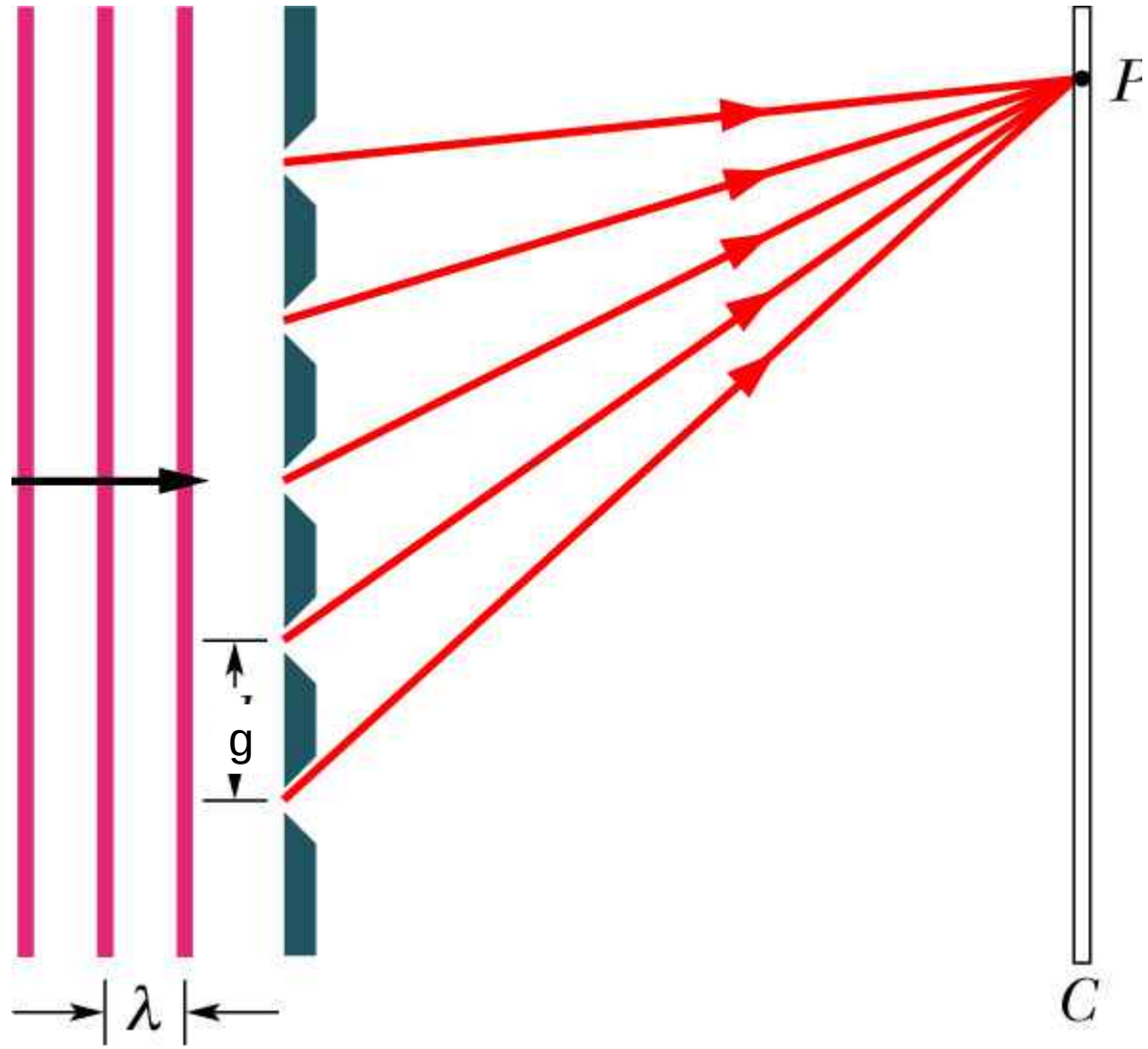


Morphofalter



Gitter

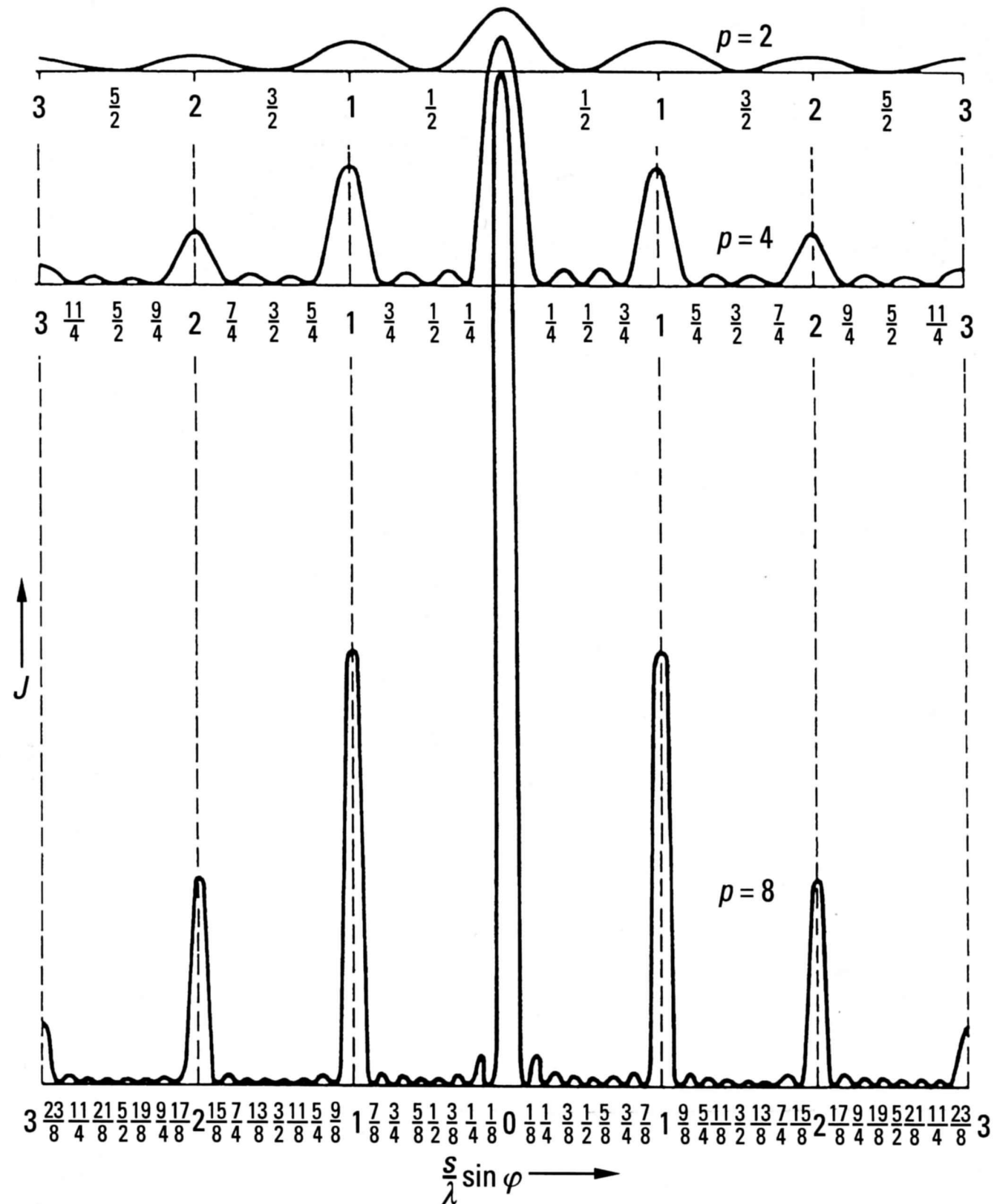
Hall 37-14



Beugung am Spaltgitter

- Fernfeld
- qualitativ

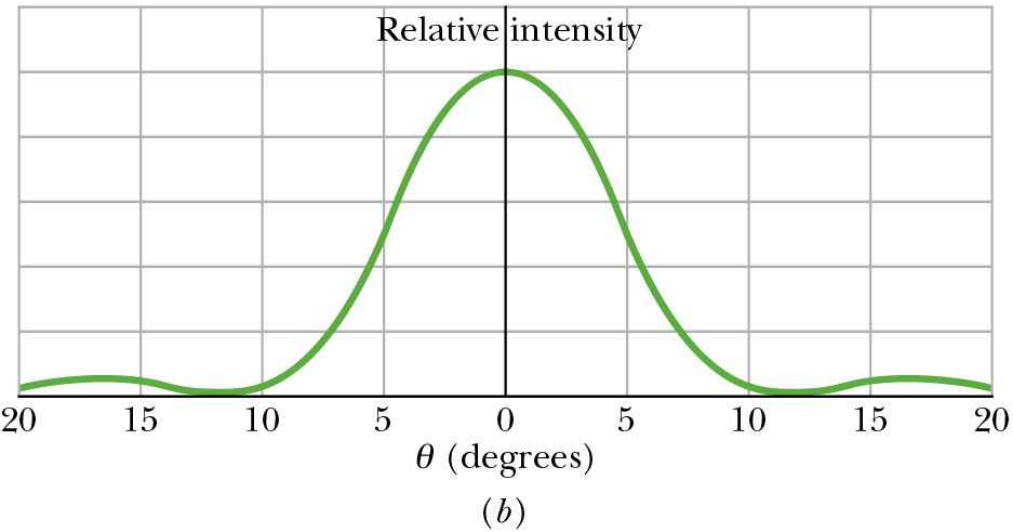
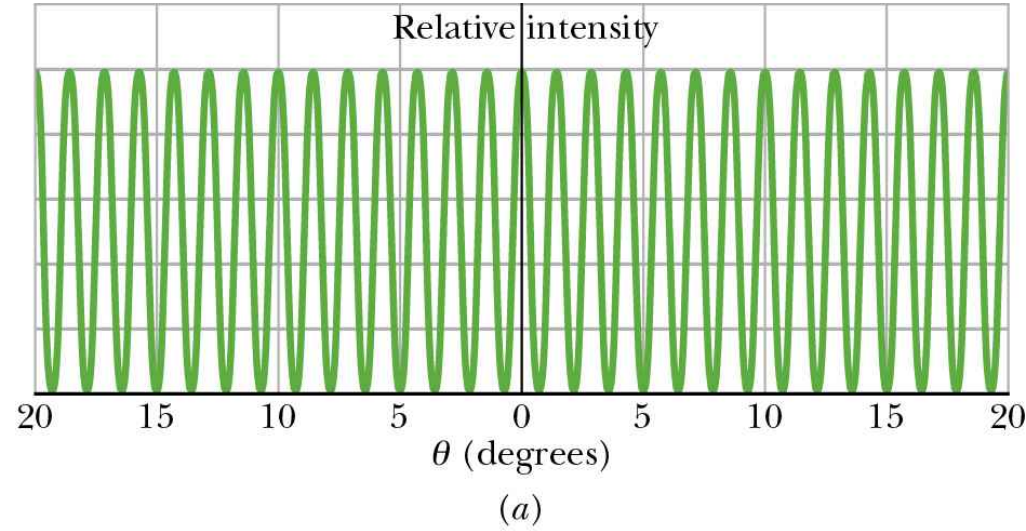
s: Gitterkonstante
 p: Zahl der Spalte



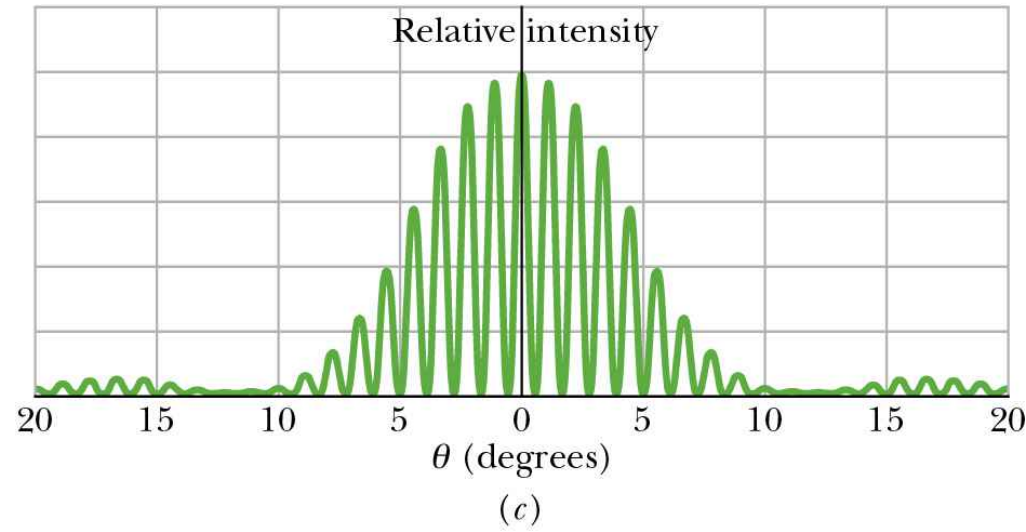
Doppelspalt

Hall 37-13

2 Spalte – bel. schmal

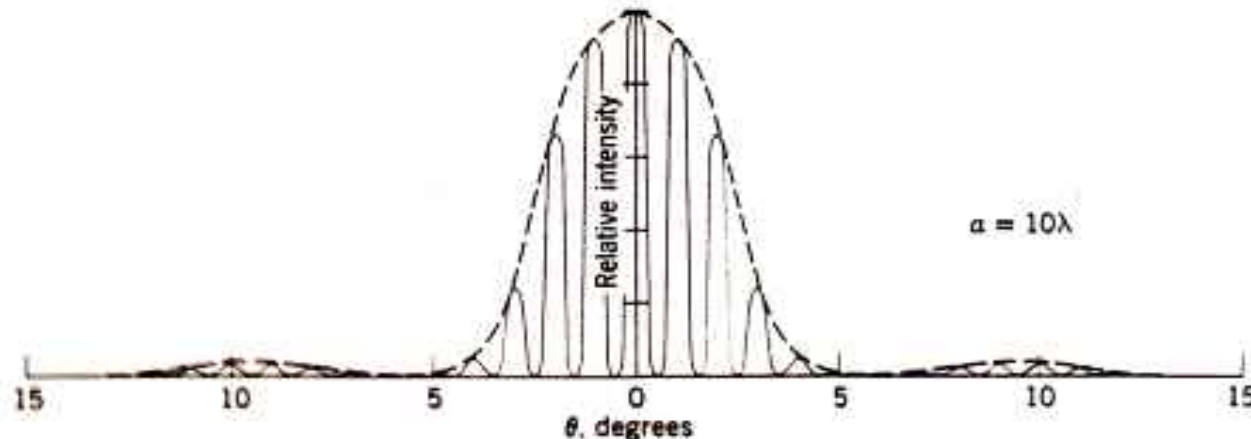
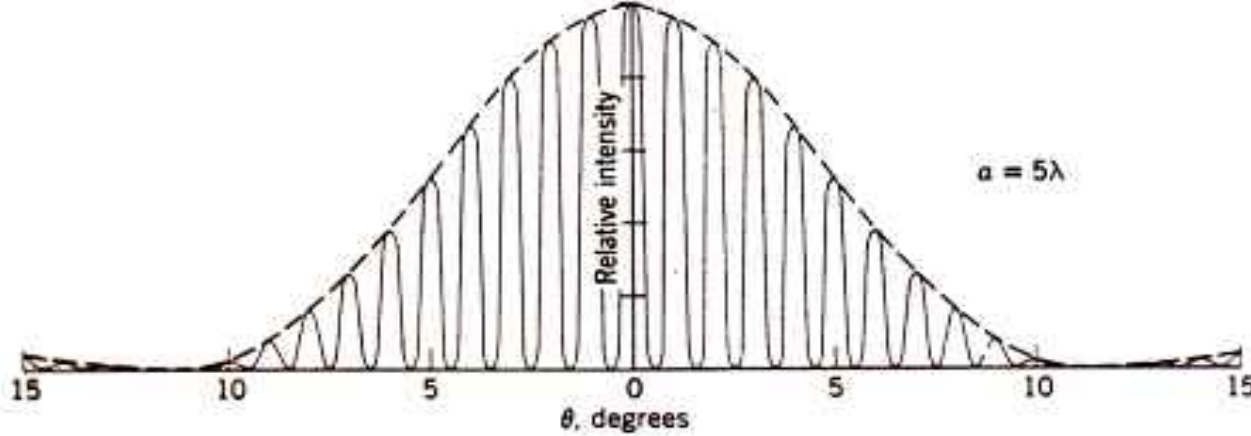
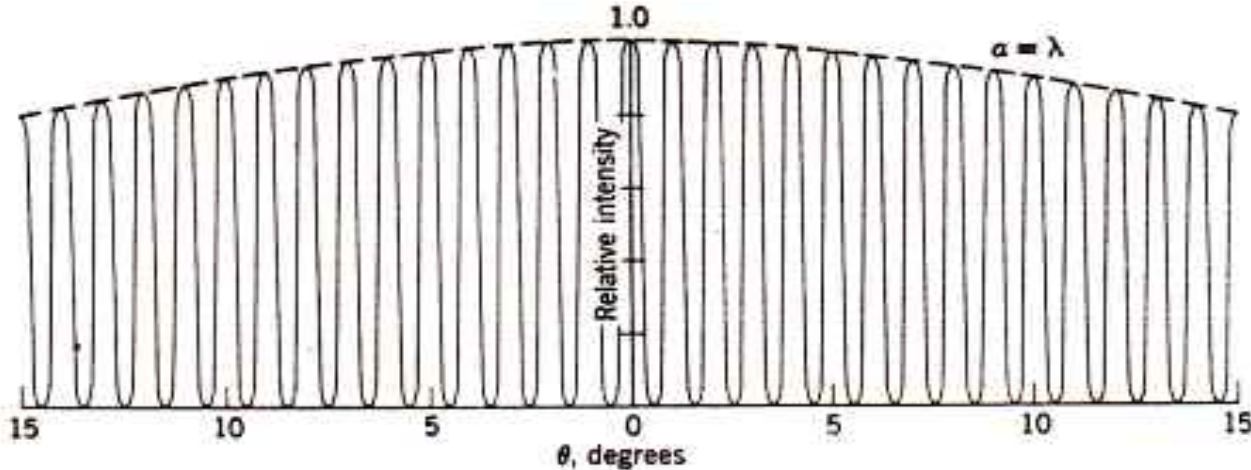


Einzelspalt



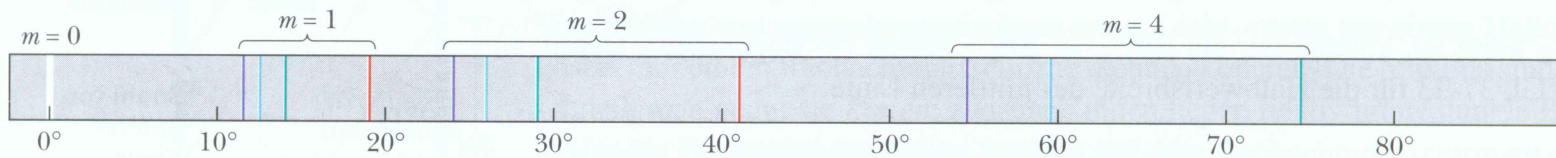
2 ausgedehnte Spalte

Doppelspalt mit $g = 50 \lambda$

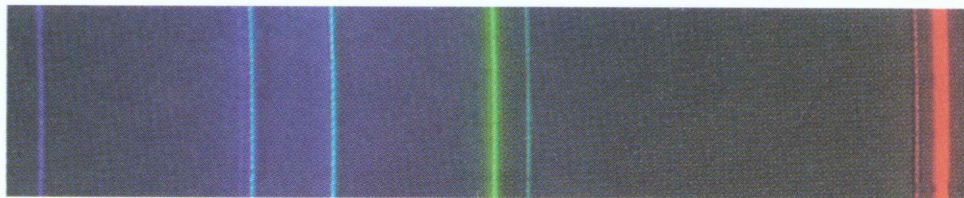


vgl. Streuung an Atomen

Gitterspektrometer:



Sichtbare Emissionslinien von Wasserstoff



Sichtbare Emissionslinien von Cadmium

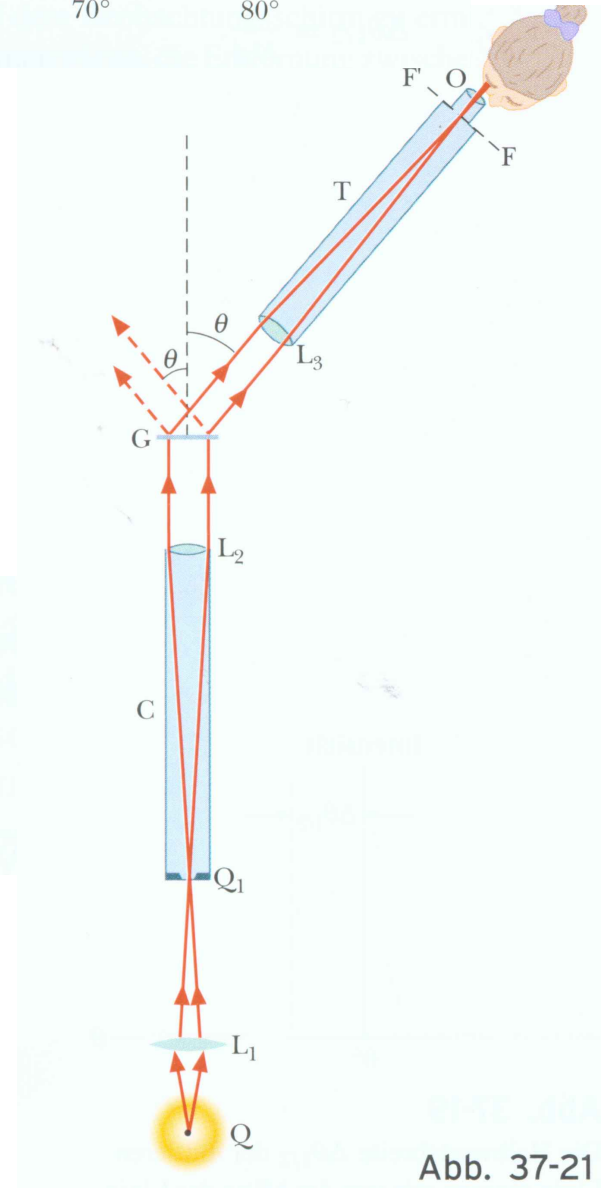
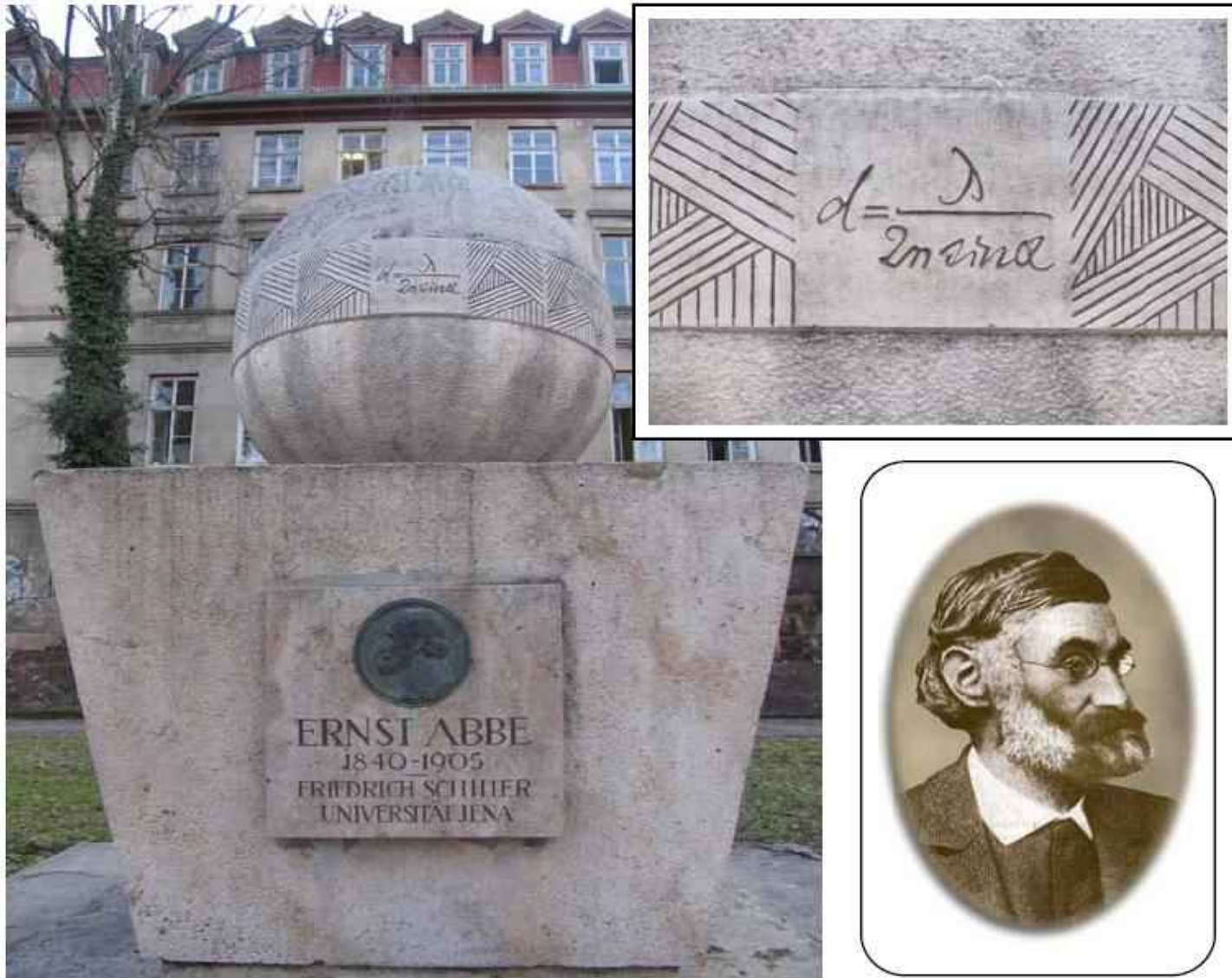
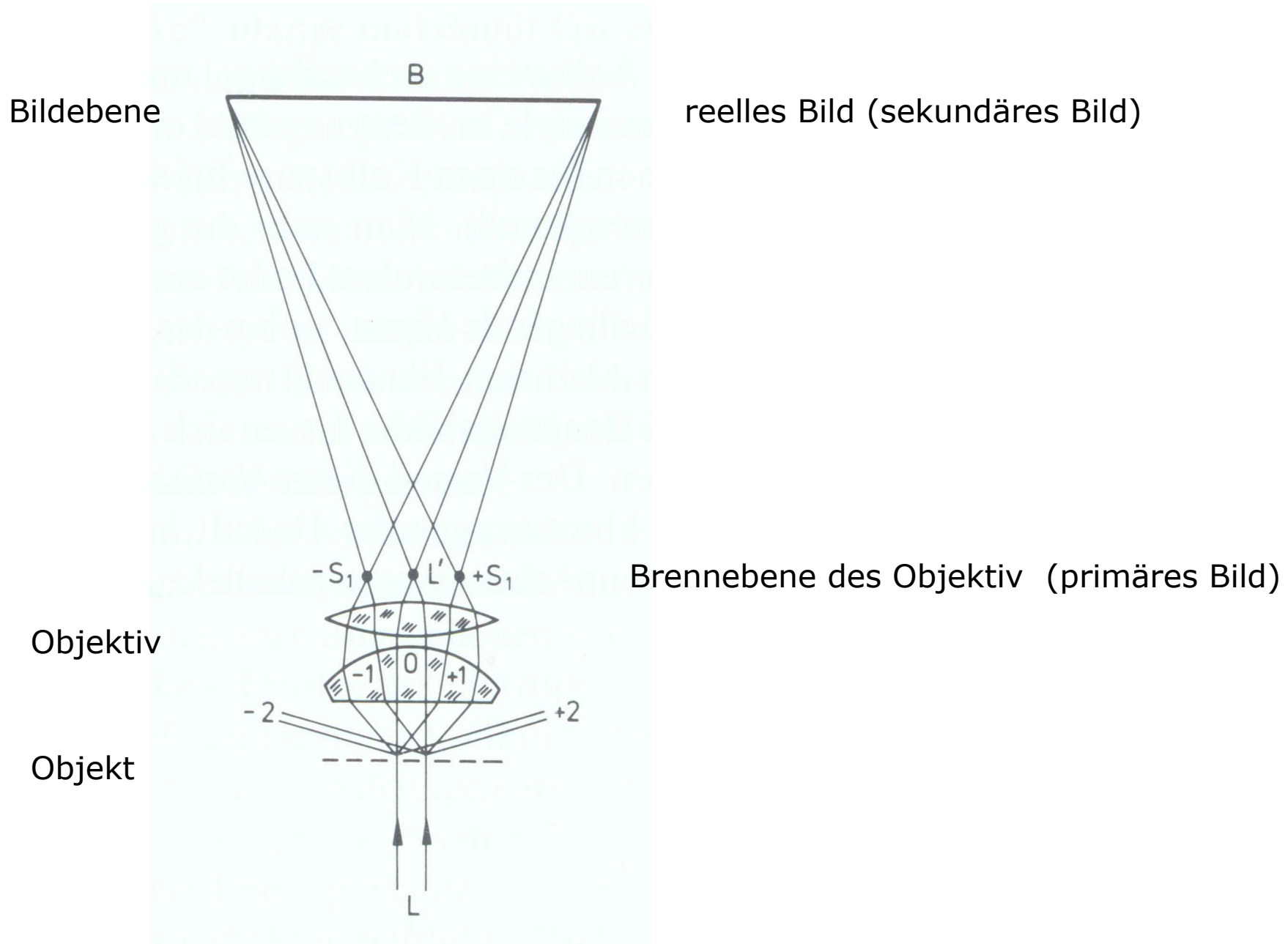


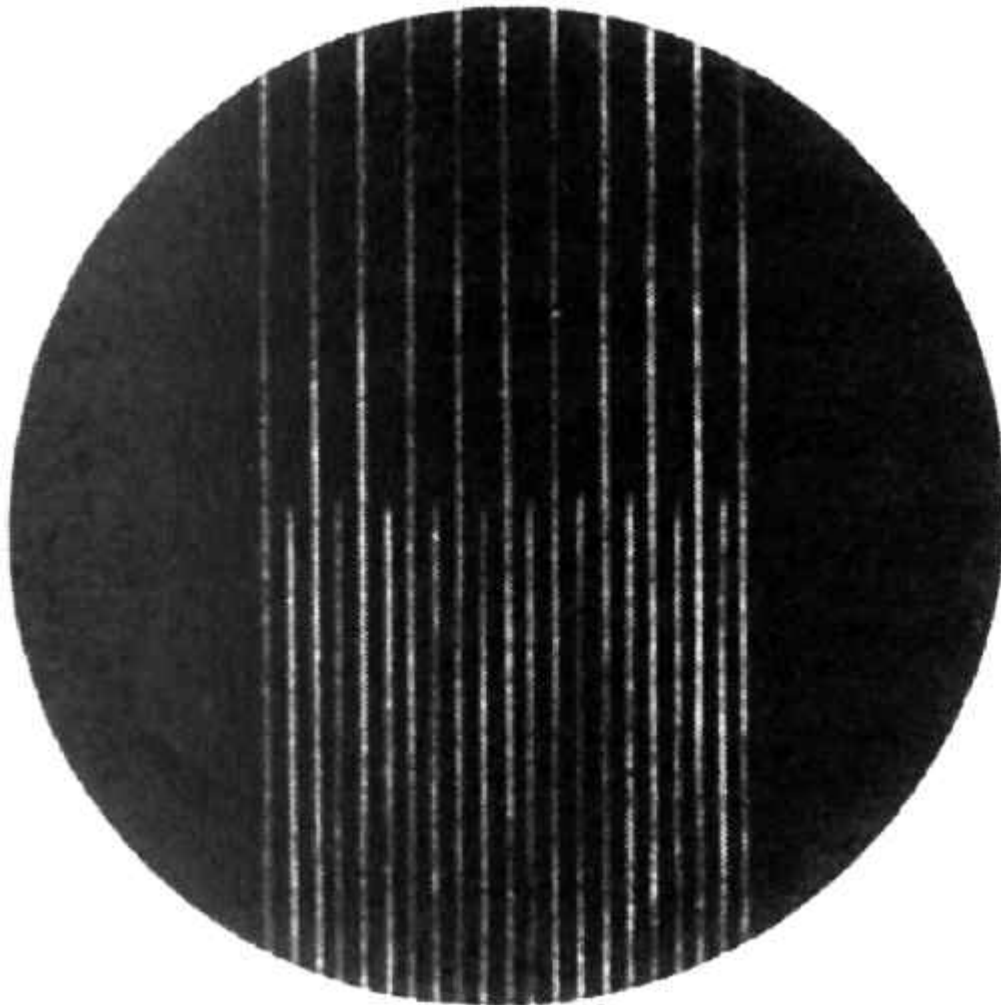
Abb. 37-21



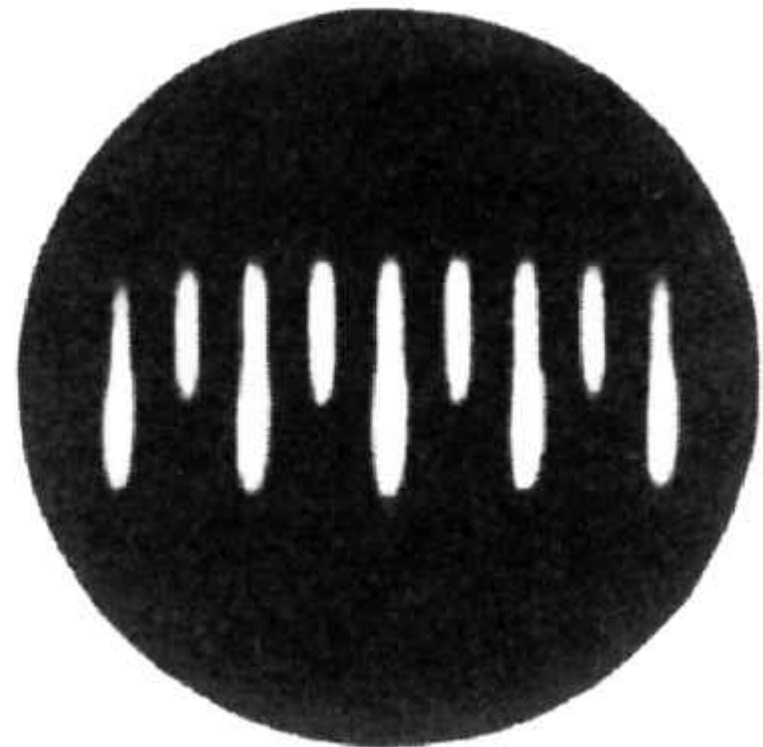
Bildentstehung im Mikroskop nach Abbe:



Gegenstand:
Strichgitter

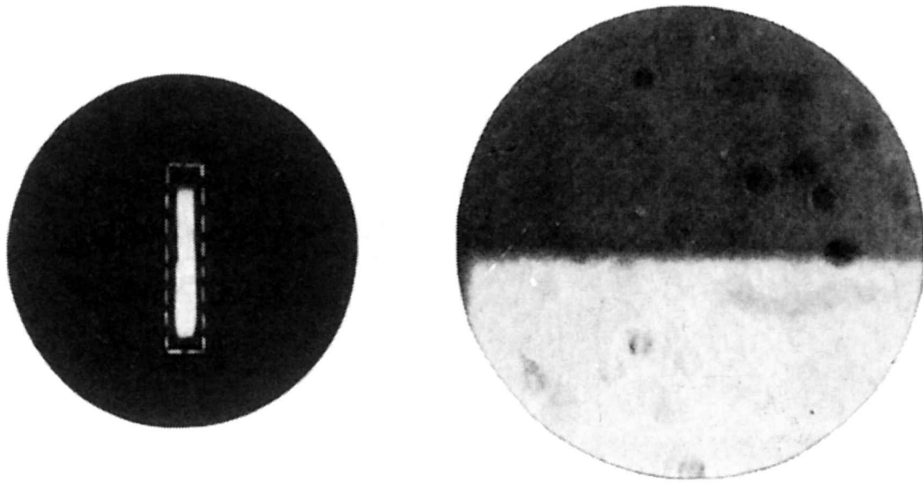


Beugungsbild in Brennebene
eines Mikroskopobjektivs

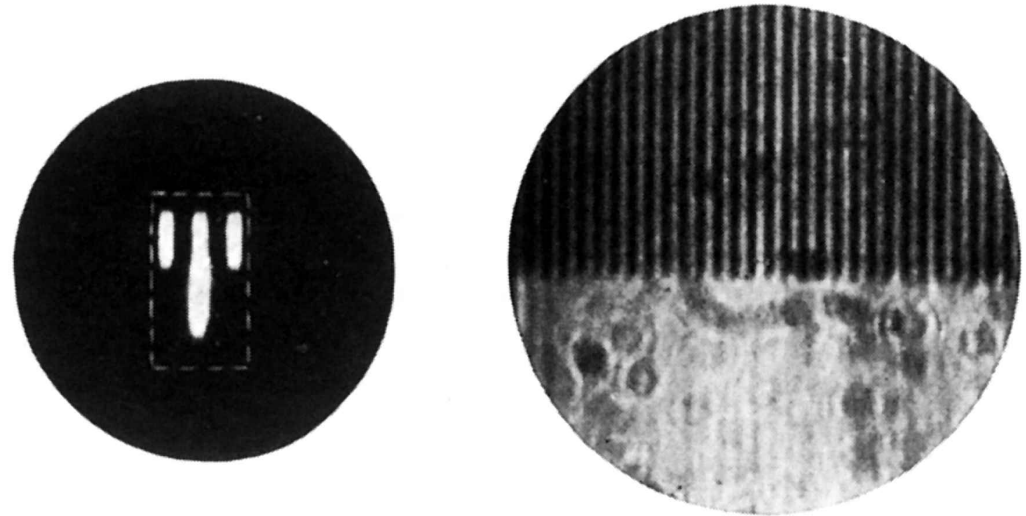


Wirkung von Schlitzblenden in der Brennebene des Objektivs

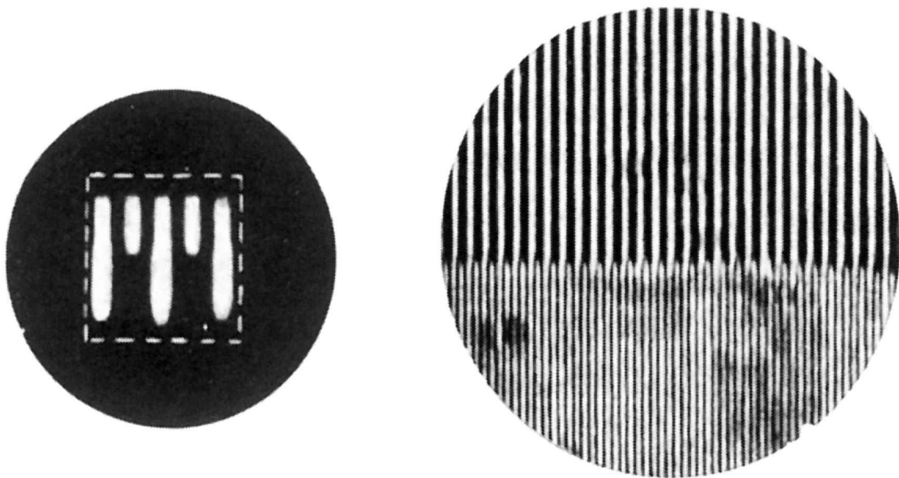
sehr schmal
nur 0. Ordnung beider Gitter



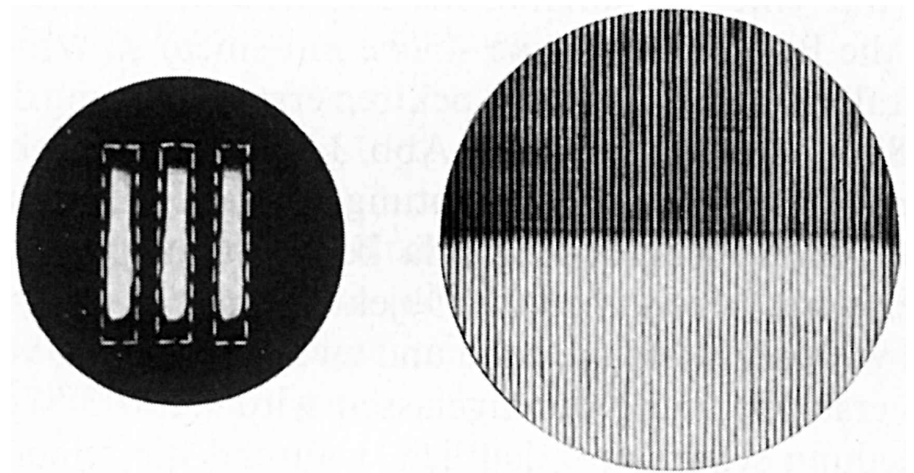
etwas breiter
auch 1. Ordnung des weiten Gitters



breit
1. Ordnung beider Gitter

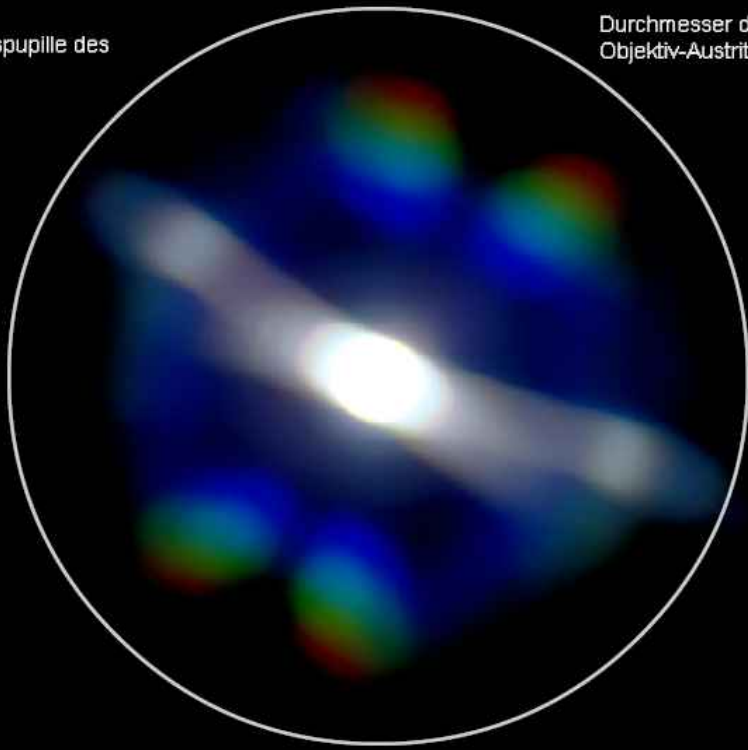


drei Schlitze
1. Ordnung des weiten Gitters
2. Ordnung des schmalen Gitters

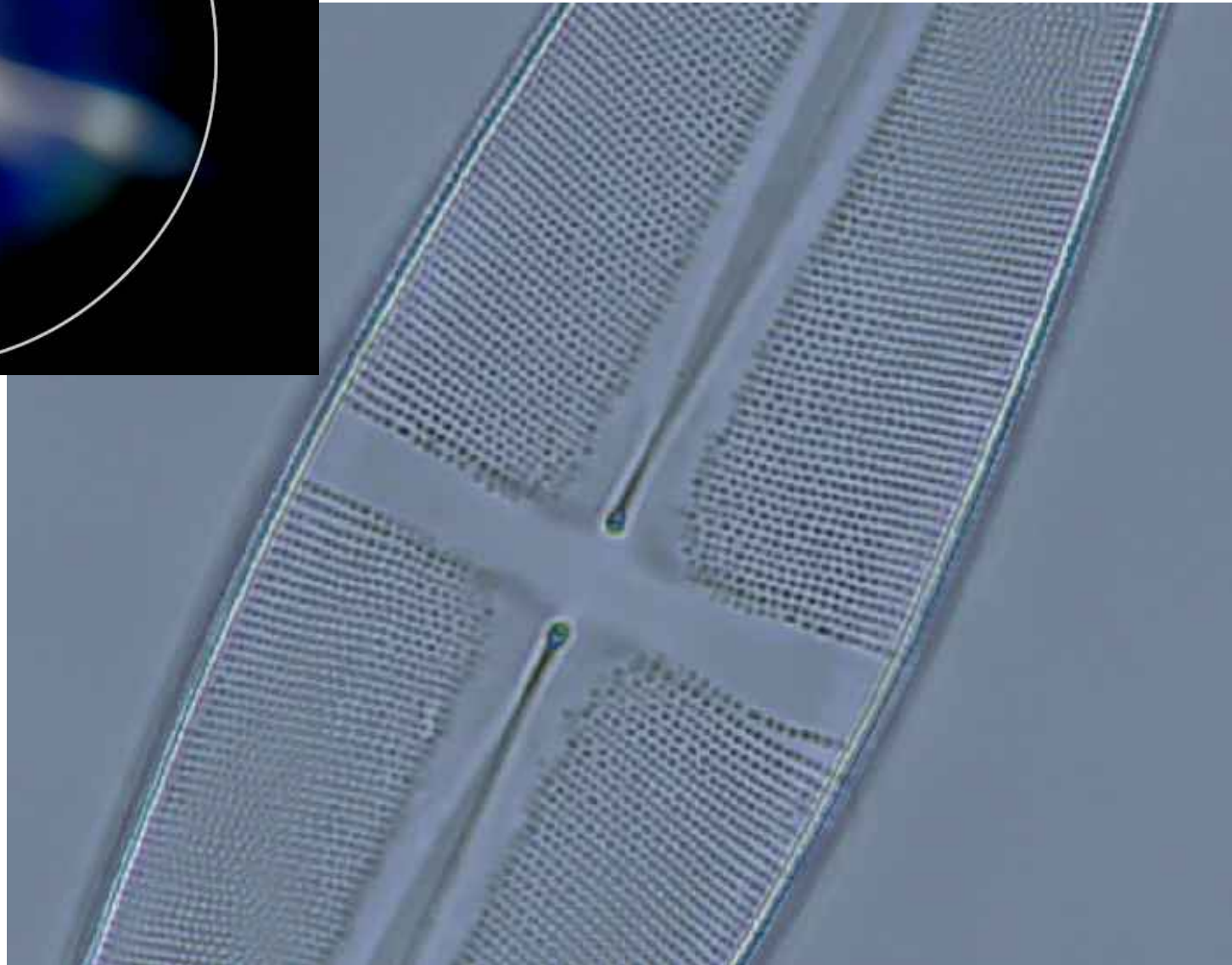


Blick auf
die Austrittspupille des
Objektivs

Durchmesser der
Objektiv-Austrittspupille



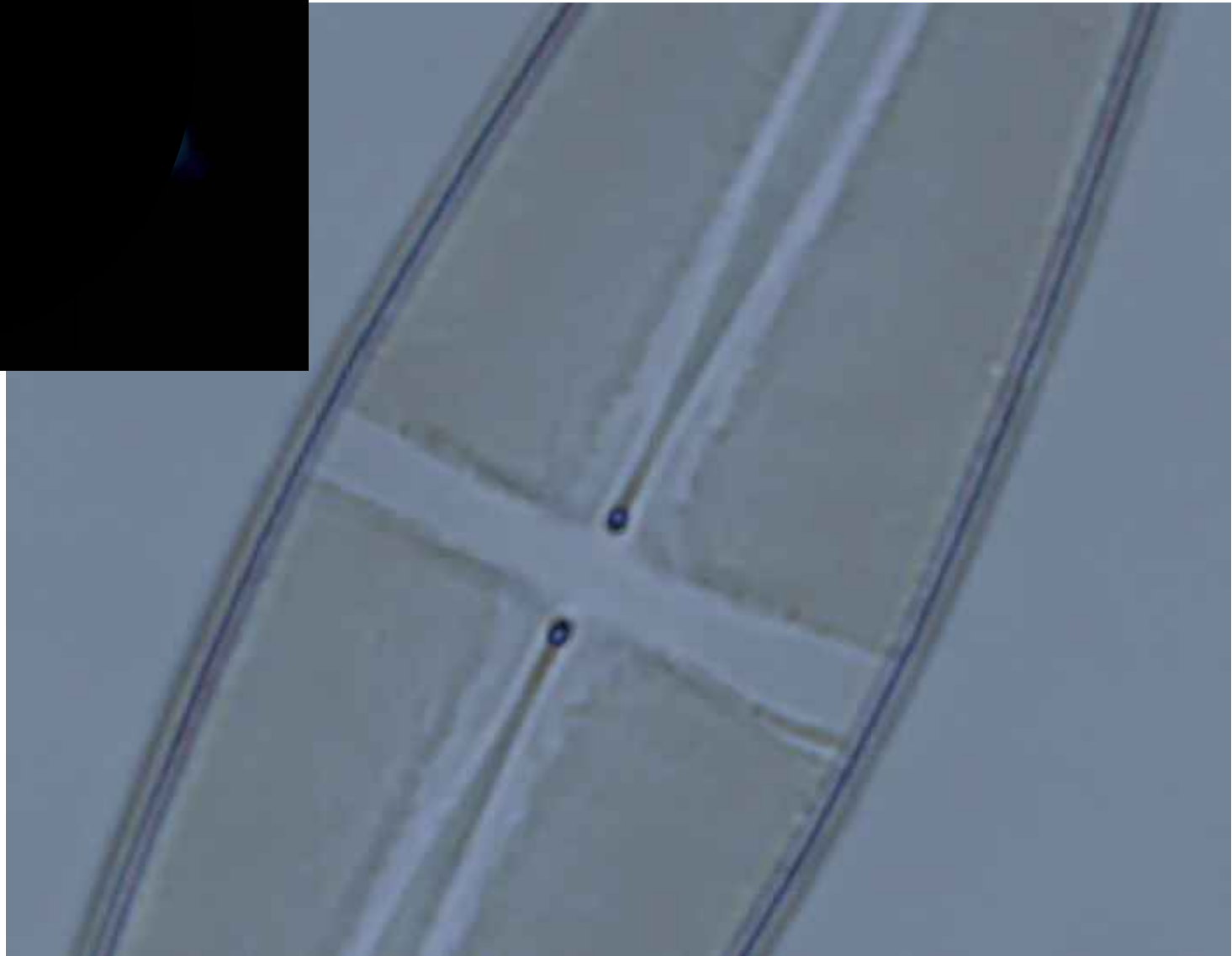
Schale einer Kieselalge



Blick auf
die Austrittspupille des
Objektivs



Schale einer Kieselalge



Holographie

Gábor Dénes (1900 - 1979)

